

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50065

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 F16L55/32 F16L55/30

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	WO 00 73619 A (SIMPSON NEIL ANDREW ABERCROMBI ;WEATHERFORD LAMB (US)) 7 December 2000 (2000-12-07) cited in the application page 3, line 14 -page 4, line 15  page 5, line 22 -page 7, line 6 page 9, line 17 -page 10, line 11 page 13, line 9 -page 14, line 8 figures 1-4	1-3,5-7, 9-16,19, 25-27  4,8,20, 22-24,28
X A	US 3 056 155 A (HARMES LEE D) 2 October 1962 (1962-10-02)  column 1, line 37 - line 68 column 2, line 27 -column 3, line 30 column 4, line 72 -column 5, line 22 figures 1,3,4	1-6,14, 20, 25-27,29 22,23
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

24 July 2003

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	<p>WO 00 63606 A (DERVAL TIMOTHY ROBERT LOUIS ;BAHARI BIJAN (GB); P A C T ENGINEERIN) 26 October 2000 (2000-10-26) page 2, line 16 - line 22</p> <p>page 3, line 10 -page 5, line 27 page 7, line 1 - line 16 page 15, line 13 -page 17, line 17 page 27, line 12 - line 24 figures 1,2,4,11,21,23</p>	<p>1-3,5-9, 12,14, 15,24-28 11,17, 19,22,23</p>
X	<p>WO 86 01751 A (STORESUND PER) 27 March 1986 (1986-03-27)</p> <p>page 2, line 37 -page 5, line 28; figure 1</p>	<p>1-3,5-8, 14,15, 25,27</p>
A	<p>WO 98 06927 A (ASTEC DEV LTD ;SIMPSON NEIL ANDREW ABERCROMBI (GB)) 19 February 1998 (1998-02-19) cited in the application page 7, line 7 -page 10, line 32; figures 1,2A,3,4A-7B</p>	<p>14,16, 25,28</p>
A	<p>US 4 854 384 A (CAMPBELL DOUGLAS C) 8 August 1989 (1989-08-08) figures 1,2</p>	<p>21,29</p>

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Information on patent family members

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